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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,221	08/13/2001	Stephen F. Gass	SDT 302	2131

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EXAMINER

ALIE, GHASSEM

ART UNIT PAPER NUMBER

3724

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,221

Applicant(s)

GASS ET AL.

Examiner

Ghassem Alie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-14, 16, 17, and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12, 13, 14, and 16 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-10, 17, and 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Appeal Brief

1. In view of the appeal brief filed on 02/06/06, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a dielectric located in the gap between the shaft and the second conductive plate as set forth in claims 1 and 17 and a dielectric located between at least a portion of the outer surface of the arbor and another of the spaced-apart conductor as set forth in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

It has been noticed that many different species are shown in the drawings. However, it is not clear which species applicant has claimed. It should be noted that applicant has stated in the appeal brief that at least a portion of the outer surface of the arbor is the other conductor as shown in Figs. 5-9. Therefore, it is assumed that applicant has claimed the invention in species in Figs. 5-9. However, Figs. 5-9 do not show a dielectric that is located in the gap

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between the shaft and the second conductor. It should be noted that restriction of the claims would be considered in the next office action, if applicant submit that other than species in Figs. 5-9 other species have been claimed.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to under 37 CFR 1.71 because it fails to teach that the dielectric located in the gap between the shaft and the second conductive plate. The specification also fails to teach that the dielectric located between at least a portion of the outer surface of the arbor and another of the spaced-apart conductor. It should be noted that

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there is no dielectric member located between the outer surface of the shaft 42 and one of the charge plates 44 or 46. See the drawings, particularly Figs. 5-9.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-6, 9, 10, 17, and 19-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to teach that the dielectric located in the gap between the shaft and the second conductive plate as set forth in claims 1 and 17. The specification also fails to teach that the dielectric located between at least a portion of the outer surface of the arbor and another of the spaced-apart conductor as set forth in claim 10. It is not clear how the upper portion of the arbor or the shaft is insulated from at least one of the charge plates or the conductors plates by the dielectric.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claim 10, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Terauchi (4,512,224). Regarding claim 10, Terauchi teaches a woodworking machine including a motor and a rotatable electrically isolated arbor 121 configured to be driven by a motor, where the arbor has an outer surface. Terauchi also teaches a circular blade 12 coupled to the arbor 121 and an excitation system adapted to generate an electrical signal. It should be noted that the capacitive coupling includes an outer surface of the arbor, a metal bar G, and dielectric members 40 which isolate the arbor and the blade from the table 10 and metal bar G. Bolts and washers 41, 42 which are located near the belt 123 are considered as the dielectric. The dielectric member 40 is located between the arbor 121 and the metal bar G. It also should be noted that an AC voltage is applied to the cutting blade through the through the bearing 14a which is considered as the excitation system. A current flows from the between the cutting blade and the bar G in accidental contact of the blade with the bar G. The current is used as a detection signal for a capacitive coupling. It should also be noted that the outer surface of and the blade is considered to be one of the spaced-apart conductors of the capacitive coupling. Terauchi also teaches a capacitive coupling adapted to capacitively couple the excitation system to the arbor 121 and transfer at least a portion of the electrical signal to the blade. Terauchi also teaches that the capacitive coupling includes two spaced-apart conductors with a dielectric 40 between them, and where at least a portion of the outer surface of the arbor is one of the conductors. See Figs. 1-6 and col. 2, lines 1-68 and col. 3, lines 1-60 in Terauchi.

Allowable Subject Matter

8. Claims 12, 13, 14, and 16 are allowed. The following is a statement of reasons for

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the indication of allowable subject matter: the prior art fails to teach a contact detection system adapted to detect contact between a person and a cutting tool, and a reaction system that stops the movement of the blade upon detection of contact between a person and cutting tool as set forth in claim 12.

Comment

9 It should be noted that claims 1-6, 9, and 17, 19-24 have not been rejected over the prior art, since the prior art does not teach a contact detection system configured to detect contact between a person and the cutting tool as set forth in claims 1 and 17. However, in view of the issues under 35 U.S.C. 112, first paragraph, the objection to the specification under 37 CFR 1.71, and the objections to the drawings, the allowability of the claimed subjected matter cannot be indicated at this time.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

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about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (too-free).

GA/ga

April 13, 2006



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